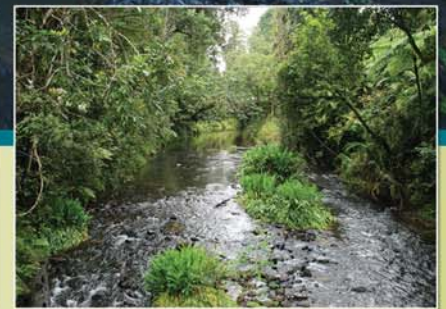




Sustainable Nature Based Tourism: Planning and Management

Report on Visitation and Use at Henrietta Creek, Far North Queensland, 2009/2010



Julie Carmody and Bruce Prideaux



Australian Government
Department of the Environment,
Water, Heritage and the Arts



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Sustainable Nature Based Tourism: Planning and Management

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Henrietta Creek, Far North Queensland, 2009/2010**

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Australian Government
**Department of the Environment,
Water, Heritage and the Arts**

Supported by the Australian Government's
Marine and Tropical Sciences Research Facility
Project 4.9.2 Sustainable Nature Based Tourism: Planning and Management

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ISBN 978-1-921359-92-7

This report should be cited as:

Carmody, J. and Prideaux, B. (2011) *Sustainable Nature Based Tourism: Planning and Management. Report on Visitation and Use at Henrietta Creek, Far North Queensland, 2009/2010*. Report to the Marine and Tropical Sciences Research Facility. Published by the Reef and Rainforest Research Centre Limited, Cairns (58pp.).

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March 2011

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Acronyms and Abbreviations

DERM	Queensland Department of Environment and Resource Management
MTSRF	Marine and Tropical Sciences Research Facility
N	Entire survey sample
n	Portion of survey sample
QPWS	Queensland Parks and Wildlife Service
WTMA	Wet Tropics Management Authority
WTWHA	Wet Tropics World Heritage Area

Acknowledgements

Funding for this research was provided by the Australian Government's Marine and Tropical Sciences Research Facility (MTRSF) and the Wet Tropics Management Authority.

We would like to thank the following people for their assistance. Those involved in the distribution and collection of surveys were Fay Falco-Mammone and Julie Carmody. Data entry was completed by Debbie Cobden.

We would also like to acknowledge the assistance of Max Chappell of the Wet Tropics Management Authority; and Andrew Millard, Dave Phillips and Matt Wallace from the Queensland Department of Environment and Resource Management.

Key Findings

The following key findings are based on a visitor survey (N = 96) undertaken at Henrietta Creek between October 2009 and May 2010. Where findings are reported as a mean, 1 represents the lowest level of agreement with given statements by survey respondents, while 6 represents the highest level of agreement.

Respondent Profile

- More domestic (67.7%) than international visitors (32.3%) were surveyed at Henrietta Creek.
- Respondents ranged from 16 to 75 years of age. The average age was 43 years.
- More than half of all travel parties consisted of two adults (n = 52).

Travel Patterns

- Respondents reported travelling to the site from Cairns (13.6%), Innisfail (13.6%), Mission Beach (8.0%) and Josephine Falls (6.8%).
- After leaving Henrietta Creek, 52.4% of respondents reported they would travel to the Atherton Tablelands or further west.
- The main sources respondents used to find information about Henrietta Creek were road signs (40.4%) and previous visits (29.8%).

Reasons for Visiting Henrietta Creek

- The main reasons for visiting Henrietta Creek were to see the natural features and scenery (mean = 5.21) and be close to nature (4.92).
- Observing the scenery (66.3%), relaxing (54.8%) and picnicking (54.7%) were the activities most enjoyed at the site.

Perceptions of the Natural Environment

- The natural environment at Henrietta Creek is considered interesting (mean = 5.32), appealing (5.20) and in good condition (5.12).
- The site was not considered to be disturbed and impacted (mean = 2.45).

Perceptions and Use of the Site Facilities

- The condition of the facilities at Henrietta Creek was considered to be good (mean = 5.11) and well managed (5.10).
- However, overall the facilities were not considered to be adequate (mean = 4.90).

Perceptions of Signage

- The rules and safety signage was considered easy to understand (mean = 4.80).
- Directional signage to Nandroya Falls requires upgrading.

Satisfaction with the Visitor Experience

- The waterfall (12.8%) and tranquility (10.6%) enhanced the visitor experience of Henrietta Creek.

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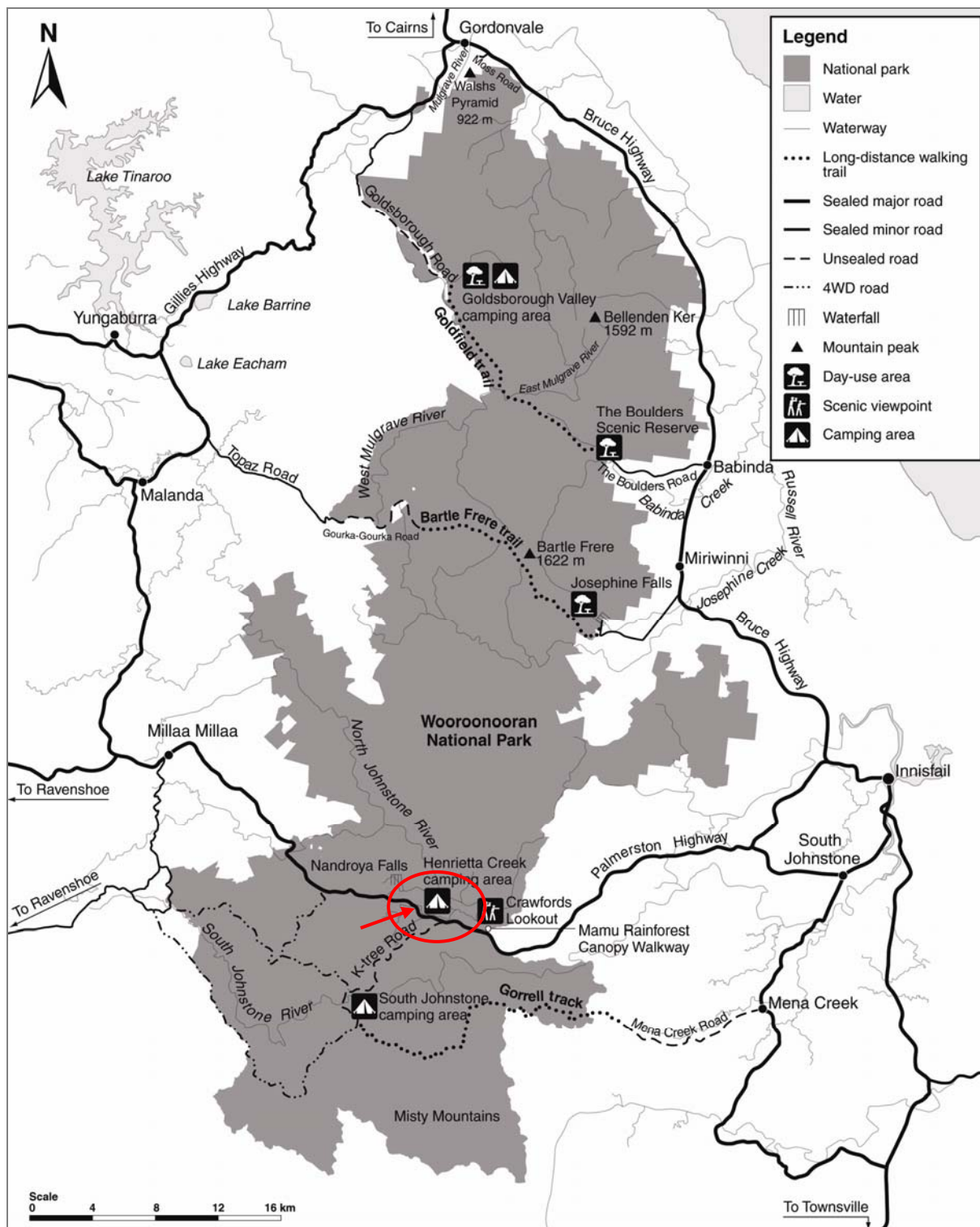


Figure i: Wooroonooran National Park, showing the Henrietta Creek visitor survey site. Map courtesy of Queensland Parks and Wildlife Service, Department of Environment and Resource Management.

1. Introduction

This report is one of a series of ten that examine visitor activity at sites within Wet Tropics rainforests. The aim of the research was to provide a snapshot of visitor activity to inform management on how sites are used and investigate visitors' views on site management. Visitor data was collected using a self-completed visitor survey. Collectively the series of reports will provide an overall understanding of how visitors use the rainforest and provide managers with feedback that can be used for site management and future planning.

Responsibility for the management of the Wet Tropics rainforests is shared by the Wet Tropics Management Authority (WTMA) and the Queensland Department of Environment and Resource Management (DERM). The WTMA was established after listing of the Wet Tropics as a World Heritage site and is responsible for the planning of visitor sites across the Wet Tropics World Heritage Area (WTWHA). The Queensland Parks and Wildlife Service (QPWS), an agency of the DERM, has responsibility for the day to day management of site infrastructure including toilets, car parking, signage, viewing lookouts, boardwalks, walking trails and other recreational facilities. The Wet Tropics has a large number of visitor sites, some of which have high rates of visitation. A number of sites have relatively low visitation rates, but all offer unique nature-based visitor experiences.

1.1 Site Location and Description

Henrietta Creek in Wooroonooran National Park is located approximately 38 km west of Innisfail on the Palmerston Highway. It is a dual purpose site used by day visitors and overnight campers. Three numbered camping sites, as well as several unnumbered camp sites cater for campervans, motor homes, caravans and tents. The Henrietta Creek site can accommodate a maximum of eighty overnight visitors and available facilities include composting toilets, picnic tables, a shelter shed and a gas-powered barbeque. A self-registration camping booth is located near the entrance to the site. Visitors have access to two swimming holes, one at Gooligan Creek and the other in Henrietta Creek. A 350 metre walking track through a section of forest that includes native banana trees provides access to Gooligan swimming hole. A 6.6 km walking track beginning to the west of the Henrietta Creek camping area leads to Silver Falls and Nandroya Falls. Interpretive signage located on the bridge explains the presence of platypus and the area's high rainfall. A map of the location of Henrietta Creek showing the survey site is provided at Figure i.

1.2 Previous Research

Two previous visitor surveys have been conducted at Henrietta Creek, the first in 1993 and the latter in 2002. The 1993 survey was undertaken by Manidis Roberts Consultants and was designed to provide information on visitor use and travel patterns. Surveys were conducted during both the wet (March/April) and dry seasons (September/October). The research approach included traffic counts, site observations and interviews with visitors. Three survey instruments were used – one for independent travellers, one for visitors travelling with a commercial tour operator and one left at sites as a self-registration survey.

In 1993, an estimated 31,429 visitors and 11,607 vehicles (Manadis Roberts, 1994) used the Henrietta Creek site. Based on a sample size of 61 interviewer administered surveys, the Manadis Roberts research found that 41.4% of independent respondents travelled as a couple, 24.4% as a family and 17.9% with friends. The average length of stay at the site was 0.6 hours. Most respondents travelled to the site in private vehicles (84.8%). Half of all respondents travelled to the site from locations on the Atherton Tablelands (51.0%) while 16.3% had travelled from Innisfail. The main reasons given for visiting Henrietta Creek (using a Likert scale of 1 = 'not important' to 5 = 'very important') were to view the scenery

(mean = 4.2), be close to nature (4.1), see the Wet Tropics World Heritage Area (4.0) and experience tranquility (3.8). The main activities undertaken were relaxing (86.2%), scenic viewing (82.8%) and camping (44.8%). Short walks of up to five kilometres were undertaken by 27.6% of the sample and 6.8% of respondents reported they went swimming. The mean level of satisfaction with respondents' visits to Henrietta Creek was 2.2 on a scale of 1 being 'extremely satisfied' to 6 being 'very unsatisfied'.

A second site survey was undertaken by Bentrupperbäumer (2002). The results based on 99 responses showed road signage, prior visits and maps were the main sources of information used to locate the site. The largest group of respondents was aged 30-39 years and included both domestic and international visitors. Domestic respondents were mainly residents of the Wet Tropics region. Bentrupperbäumer (2002) reported that respondents' main reasons for visiting Henrietta Creek were to see the natural features and scenery, and to be close to and experience nature. The average amount of time spent at the site was less than one hour. Respondents reported a need for additional signage on topics that included the site's natural history, as well as ecological and cultural information. Several issues were raised about the site's maintenance including drainage of campsites and the poor condition of tables and chairs located at the site. Most respondents were unaware that the site was World Heritage listed. Visitor satisfaction with Henrietta Creek was rated as moderately high.

1.3 Traffic Counter Data

DERM Rangers collected traffic data at the site during 2008 and 2009. Table 1 outlines traffic counter data on a monthly and daily basis. The site has a morning peak between 10.00 and 11.00 am, averaging eight vehicles on weekdays and up to eleven vehicles on weekends. A second peak occurs at midday with an average of eight vehicles on weekdays and ten vehicles on weekends.

Table 1: Counts of vehicular traffic recorded at Henrietta Creek between June 2008 and January 2009. Data courtesy of Queensland Parks and Wildlife Service, DERM.

Time period	Vehicles counted	Average vehicles per day
June 2008	1,884	62.8
July 2008	2,390	77.1
August 2008	2,237	72.2
September 2008	2,085	69.5
October 2008	2,254	72.7
November 2008	1,756	56.6
December 2008	1,728	55.7
January 2009	2,290	73.8

Figure 1 illustrates the traffic counter data (as per Table 1) for Henrietta Creek collected between June 2008 and January 2009. The largest number of vehicles recorded at the site occurred in July 2008 (1,195 vehicles) while the lowest number of vehicles recorded occurred in December 2008 (864 vehicles). Data was not recorded beyond January 2009.

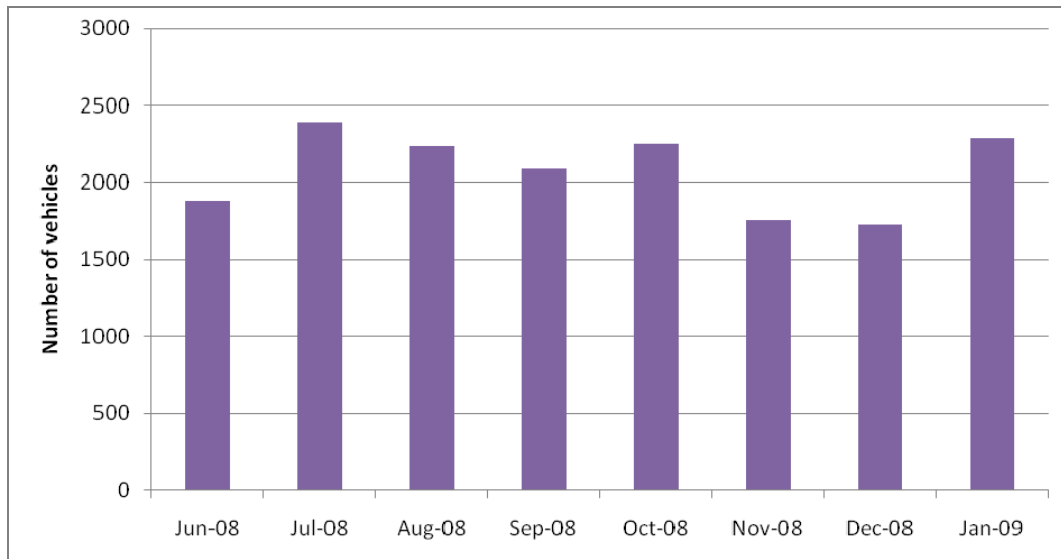


Figure 1: Counts of vehicular traffic recorded at Henrietta Creek between June 2008 and January 2009. Data courtesy of Queensland Parks and Wildlife Service, DERM.



2. Methodology

The aims of this report are to:

- Investigate visitor activities undertaken at the Henrietta Creek visitor site; and
- Identify visitors' views about aspects of the site including its management.

Specific objectives of the research were to:

- Provide a snapshot profile of visitors to the Henrietta Creek site;
- Understand visitors' perceptions of the management of the site;
- Understand visitors' perceptions of the natural environment at the site;
- Gain an understanding of visitors' travel patterns within the Wet Tropics region; and
- Assess the suitability of the interpretative information provided at the site.

A convenience sampling technique was used and data was analysed with the SPSS v17 statistical package.

This research complements earlier research (Carmody and Prideaux, 2008) that investigated how local residents used the Wet Tropics and their views on its management.

2.1 Survey Instrument

To collect data on a range of issues related to visitor expectations and experiences, a survey (Appendix 1) was developed in conjunction with officers from the WTMA. The survey instrument was based on a previous survey used in 2001/2002 which enabled some general comparisons to be made with earlier research. The self-completed survey contained 29 closed and open-ended questions and provided space for respondents to write additional comments. Open-ended questions were used because they can test specificity of knowledge more effectively (as shown by Whitmarsh, 2009), provide richer responses (Altinay and Paraskevas, 2008) and can minimise social desirability bias (Budeanu, 2007). Survey questions were grouped into eight sections commencing with demographic data. Table 2 outlines the components of the survey. Survey staff recorded site details including location, date, time of collection and weather conditions on the front cover of the survey instrument.

Table 2: Components of the Henrietta Creek visitor survey.

Section A	Background information	Place of residence, occupation, education, age, gender
Section B	Travel and transport	Organised tour or free and independent traveller, travel party, mode of transport, pre- and post-visit of site, experience of protected natural areas
Section C	Reasons for visiting	Motivations, activities, time spent at site, willingness to pay
Section D	Natural environment	Perceptions of the natural environment
Section E	Site facilities	Use of site facilities, expectations of facilities, perceptions of facilities, ranger presence
Section F	Information	Prior information search, perceptions of on-site information, additional information required
Section G	Visitor experience	Aspects of visit that enhanced and detracted from experience, perceptions of crowding
Additional comments		Open-ended to allow for any comments and feedback

2.2 Survey Collection

Surveying was carried out by two experienced research assistants using a convenience sampling technique. Visitors who (a) were returning from the Nandroya Falls walk, (b) were camping or (c) had stopped at the site were approached and asked to complete the survey. Researchers explained the purpose of the survey and the approximate time required for completion. A postcard or WTMA cassowary sticker was offered as a token of appreciation to those returning the survey. Table 3 outlines the schedule and collection of surveys for the Henrietta Creek visitor site.

Table 3: Henrietta Creek visitor survey collection times and details (N = 96).

Date	Day	Weather	Visitor Frequency	Percent of Total
2 October 2009	Friday	Sunny and warm	20	20.8
28 November 2009	Saturday	Overcast and warm	7	7.3
1 May 2010	Saturday	Overcast	12	12.5
2 May 2010	Sunday	Overcast and warm	34	35.4
3 May 2010	Monday	Overcast and cool	1	1.0
14 May 2010	Friday	Overcast and cool	12	12.5
15 May 2010	Saturday	Overcast	10	10.4
Total			96	100.0

Surveys were collected on weekdays and weekends between 8:30 am and 6:00 pm (Figure 2). Visitation at the site generally peaked between 11:00 am and 2:00 pm.

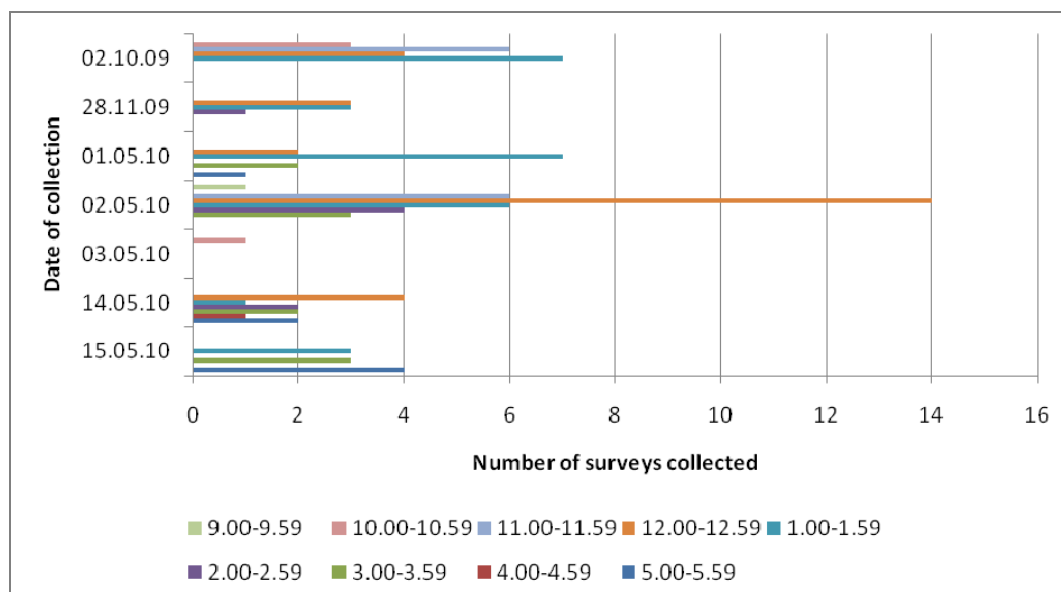


Figure 2: Surveys collected by date and time (N = 96).

2.3 Non-response and Observations

Refusals to complete the survey were recorded on-site and are presented in Table 4. Of the 116 people approached, 17.2% declined to participate (n = 20). The main reasons given for not participating were a general lack of time (7.0%) and disinterest (5.3%). In addition, tourists stopping to use the toilet facilities, as well as those driving into the site and then back out without stopping were recorded (n = 64).

Table 4: Reasons given for not participating in the Henrietta Creek visitor survey (n = 20).

Reason for not participating in survey	Frequency (n)	Percentage of total number of people approached (n = 116)
No time / Won't be stopping at the site for very long	8	7.0
Not interested in taking part in the survey	6	5.3
Language barrier	4	3.5
No [reading] glasses	1	0.9
Illiterate	1	0.9
Non-Response	20	17.6
Visitors who stopped to use toilet facilities only	37	
Vehicles driving into the site and back out again without stopping	27	

A limited number of observations were made during the survey period of the behavior of visitors at the site. Observations of note included the inoperability of the barbeque, recorded on 1 May 2010; a number of visitors brought dogs into the site; and on several occasions visitors stopped only long enough to read the self-registration camping booth information before leaving. March flies, mosquitoes and other biting insects created some discomfort while visiting the site on several occasions.

2.4 Limitations

There were some limitations associated with the research that should be considered prior to generalising the results:

- First, the survey was conducted using a convenience sampling approach and may not be representative of all visitor segments using the site;
- Second, the sample size was limited by time and budget constraints;
- Third, the survey was only available in English, resulting in a possible under-reporting of some nationalities visiting the site;
- Fourth, there was potential for social desirability bias occurring where respondents offered answers that are seen to be desirable or acceptable but may not reflect their true opinions. In most cases it is difficult to determine the level of social desirability for any given question;
- Finally, while commercial tour operators hold permits for Henrietta Creek, there were no tour groups encountered on survey collection days.

Understanding the Results

Both closed questions with specific response options and open-ended questions were used in the visitor survey. The advantage of closed questions is that it allows the researcher to investigate specific issues of interest while open-ended questions provide a good indication of top-of-mind responses and concerns of interviewees. Closed response questions generally asked respondents to use a six-point Likert scale. In the following discussion, the results of closed questions are reported as means and as the percentage breakdown by the six items on the Likert scale. Means are useful for ranking in order of importance while percentage breakdown gives a clearer indication of the strength of agreement or disagreement with a particular given statement. The following discussion should be read with these considerations in mind. It should also be noted that not every question was answered by all respondents, thus the 'n' values of tables and figures may vary. The 'n' value reports valid responses. The 'N' value reports the entire sample.



3. Findings

The results presented in this report are from the Wet Tropics Visitor Site Level Survey distributed at Henrietta Creek in 2009 and 2010.

3.1 Respondent Profile

An equal number of males (50.0%) and females (50.0%) completed the visitor survey.

Place of Residence

Respondents' places of residence are provided in Table 5. More domestic (67.7%) than international visitors (32.3%) were surveyed at Henrietta Creek. The largest group of domestic respondents (41.9%) was residents of North Queensland (defined as all locations from Townsville north). International respondents were predominately from Europe (18.3%) with German nationals comprising the largest sector in this group.

Table 5: Origin of Henrietta Creek survey respondents (n = 95).

	Frequency (n)	Percent (%)
DOMESTIC		
Far North Queensland	39	41.1
Other Queensland	12	12.6
New South Wales	4	4.2
Victoria	4	4.2
South Australia	2	2.1
Western Australia	2	2.1
Northern Territory	2	2.1
Domestic Total	65	68.4
INTERNATIONAL		
Europe	17	17.9
England/ UK	6	6.3
North America	5	5.3
Other	2	2.1
International Total	30	31.6
Total Domestic and International	95	100.0

Occupation

The occupation of the respondents is provided in Figure 3. The largest occupational group was professionals (29.1%), followed by retirees/semi-retirees (17.7%) and students (14.6%). There were no significant differences between the respondents' occupations and their nationalities.

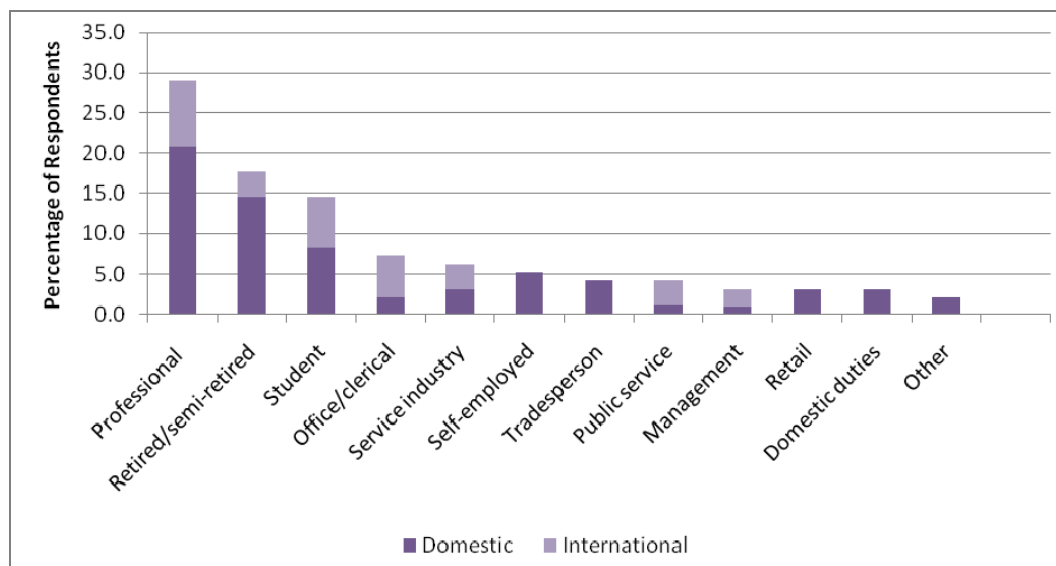


Figure 3: Occupations of Henrietta Creek survey respondents (N = 96).

Age

Figure 4 compares the respondents' ages and places of origin. Respondents ranged in age from 16 to 75 years with an average age of 43 years. Those aged 20-29 years constituted the largest group (23.2%) followed by respondents aged 30-39 years (19.0%) and 50-59 years (17.9%). International respondents aged 20-29 years (16.0%) were a significant group ($p < .005$). The largest domestic sector based on age was respondents aged 50 years or older (33.7%).

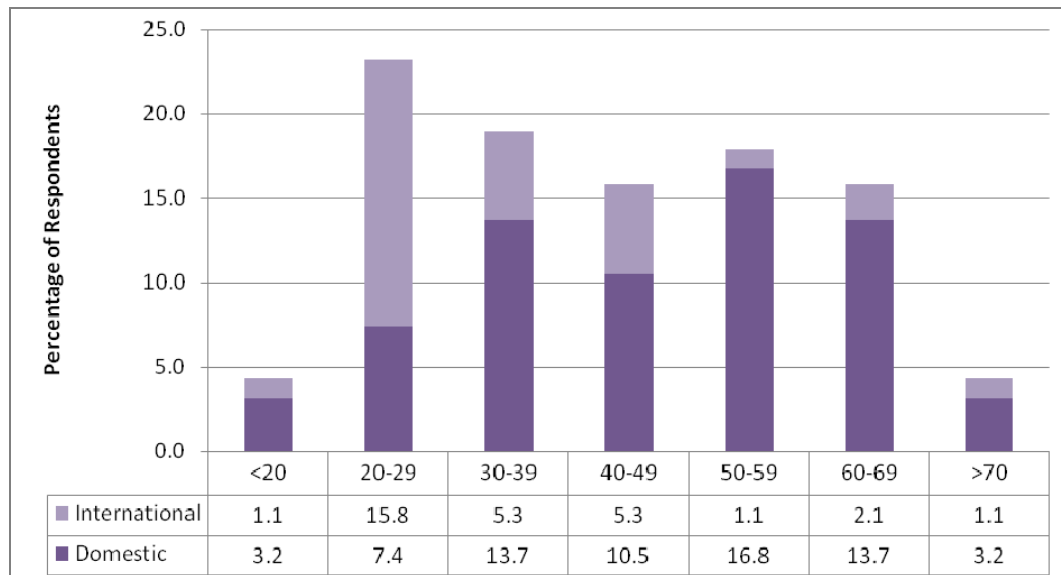


Figure 4: Age groups of Henrietta Creek survey respondents (N = 96).

Education

Figure 5 highlights survey respondents' education levels, where Tertiary A is defined as technical or further education, and Tertiary B is defined as a university qualification. For the entire sample, the largest group of respondents indicated they held a Tertiary B education (52.7%) followed by those holding a secondary education (27.4%). Most international respondents possessed a Tertiary B level of education.

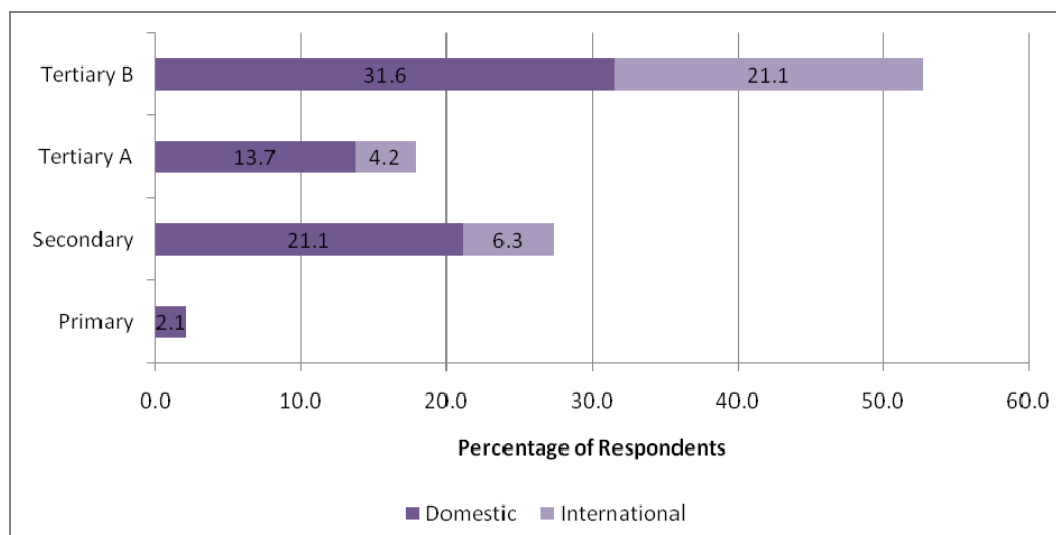


Figure 5: Levels of education attained by Henrietta Creek survey respondents (n = 95).

A cross-tabulation analysis of respondents' age and education is provided in Table 6. The largest group of respondents had a Tertiary B education and were aged 20-29 years (n = 12). The second largest group was respondents who held a Tertiary B qualification and were aged 30-39 years (n = 12).

Table 6: Respondents' age and education (n = 93).

Age Group	Primary (%)	Secondary (%)	Tertiary A (%)	Tertiary B (%)
< 20 years	1	3	-	-
20-29 years	-	3	6	12
30-39 years	-	5	1	12
40-49 years	-	2	4	9
50-59 years	-	7	3	7
60-69 years	-	5	3	7
> 70 years	1	1	-	2
Total Respondents (n = 94)	2.1% (n = 2)	27.7% (n = 26)	18.1% (n = 17)	52.1% (n = 49)
Domestic	2.1% (n = 2)	21.1% (n = 20)	13.7% (n = 13)	31.6% (n = 29)
International	0% (n = 0)	6.3% (n = 6)	4.2% (n = 4)	21.1% (n = 20)

Travel Party and Mode of Transport

Figure 6 indicates the majority of respondents reported travelling to Henrietta Creek by private vehicle (72.4%). Domestic visitors were more likely to be travelling in a private vehicle while internationals were more likely to have hired a vehicle. A small percentage of international respondents indicated hitchhiking to the site (1.3%).

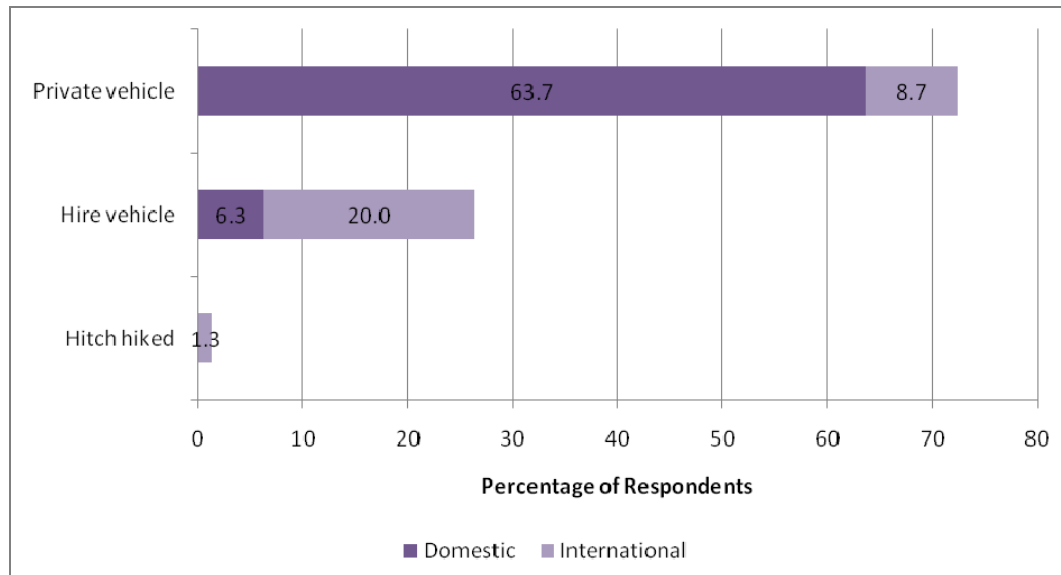


Figure 6: Modes of transport used by survey respondents to travel to Henrietta Creek (n = 80).

Table 7 reports on travel party composition. The largest group consisted of respondents travelling with a companion, but no children (52 respondents). Seventeen respondents reported travelling as a party of two adults with one or more children. The average number of adults per travel party was 2.15 with a standard deviation of 0.71.

Table 7: Composition of visitor travel parties to Henrietta Creek (n = 95).

	1 adult	2 adults	3 adults	4 adults	5 adults	6 adults
0 children	9	52	8	8	9	52
1 child	1	5	-	-	1	5
2 children	-	7	-	-	-	7
3 children	-	4	-	-	-	4
4 children	-	1	-	-	-	1
Adults per vehicle 2.15 ± SD 0.71 (range 1-4)						
Children per vehicle 0.37 ± SD 0.87 (range 0-4)						

Organised Tour Visitors

Although permits are held by commercial tour operations for Henrietta Creek, none of the respondents reported being a member of a tour group. The entire sample comprised of free and independent travellers.

Travel Flow

Respondents were asked about their travel patterns on the day of the survey, including where they had been and where they intended to go after leaving the site. Results are outlined in Tables 8 and 9. Respondents reported travelling from Cairns (13.6%), Innisfail (13.6%), Mission Beach (8.0%) and Josephine Falls (6.8%). Only 5.7% of respondents listed a visit to Mamu Rainforest Canopy Walkway prior to arriving at Henrietta Creek. Analysis of travel patterns indicated that 46.5% of respondents reported travelling from locations in the Cassowary Coast region while 21.5% reported travelling from locations on the Atherton Tablelands and further west.

Table 8: Visitors' reported previous stop before arriving at Henrietta Creek (n = 88).

	Frequency (n)	Percent (%)
Towns		
Cairns	12	13.6
Innisfail	12	13.6
Mission Beach	7	8.0
Flying Fish Point	3	3.4
Townsville	3	3.4
Bramston Beach	2	2.4
Wangan	2	2.4
Byron Bay	1	1.1
Daintree	1	1.1
Ingham	1	1.1
South Johnstone	1	1.1
Kurrimine Beach	1	1.1
Mena Creek	1	1.1
Whitsunday Islands	1	1.1
Atherton Tablelands and Outback		
Millaa Millaa	5	5.7
Atherton	4	4.5
Malanda	3	3.4
Kairi	1	1.1
Innot Hot Springs	1	1.1
Natural Attractions		
Josephine Falls	6	6.8
Mungalli Falls	3	3.4
Lake Eacham	2	2.4
Undara	2	2.4
Granite Gorge	1	1.1
Other Attractions		
Mamu Rainforest Canopy Walk	5	5.7
Nowhere/ first stop	3	3.4
Home	3	3.4
Paronella Park	1	1.1
Total	88	100.0

After leaving Henrietta Creek, respondents reported they would be travelling to Millaa Millaa (9.5%), 'home' (9.5%), Innisfail (8.4%) and Cairns (7.3%). Half of all respondents (52.4%) reported that their next stop would be either a location on the Atherton Tablelands or further west.

Based on the results outlined in Tables 8 and 9, Henrietta Creek is a destination among a group of sites and towns in the Palmerston and Cassowary Coast region and a convenient site to stop at while travelling to the Atherton Tablelands and further west.

Table 9: Intention of survey respondents to visit other places within the region after Henrietta Creek (n = 94).

	Frequency (n)	Percent (%)
Towns		
Innisfail	8	8.4
Cairns	7	7.3
Townsville	3	3.2
Mission Beach	3	3.2
Bramston Beach	2	2.1
Ingham	1	1.1
Etty Bay	1	1.1
Magnetic Island	1	1.1
Kuranda	1	1.1
Mena Creek	1	1.1
Kurrimine Beach	1	1.1
Ayers Rock	1	1.1
Atherton Tablelands and Outback		
Millaa Millaa	9	9.5
Atherton	5	5.3
Mt Garnet	4	4.3
Malanda	4	4.3
Yungaburra	3	3.2
Georgetown	2	2.1
Innot Hot Springs	2	2.1
Mareeba	2	2.1
Ravenshoe	1	1.1
Herberton	1	1.1
Chillagoe	1	1.1
Atherton Tablelands	1	1.1
Kairi	1	1.1
Natural Attractions		
Undara	4	4.3
Other Palmerston Walk	3	3.2
Crawford's Lookout	2	2.1
Waterfalls	2	2.1

	Frequency (n)	Percent (%)
Lake Tinaroo	1	1.1
Other Attractions		
Home	9	9.5
Mungalli Dairy	3	3.2
Paronella Park	2	2.1
Don't know	2	2.1
Total	94	100.0

Visits to Protected Natural Areas

Respondents were asked about the frequency of their visits to protected natural areas to gauge their experiences in natural areas generally. Figure 7 indicates that 50.5% of respondents visit natural areas more than five times per year while 34.4% visit between two and five times per year. Only 2.3% of international respondents (n = 2) indicated that Henrietta Creek was their first visit to a natural protected area. There are no significant differences between the respondents' place of origin and frequency of visitation to natural protected areas based on their age, education or occupation.

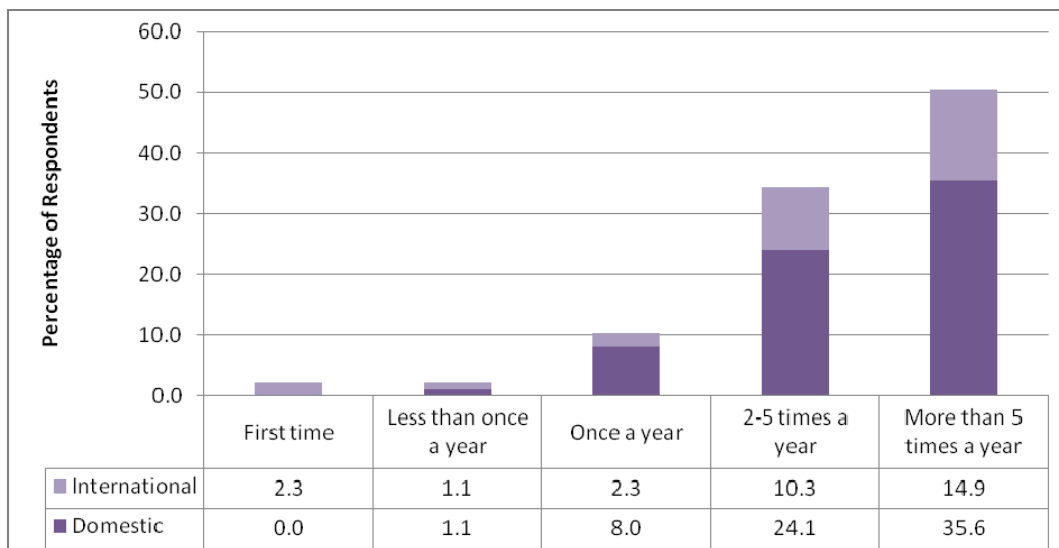


Figure 7: Survey respondents' frequency of visitation to protected natural areas (n = 87).

Reasons for Visiting Henrietta Creek

Respondents were asked to respond to a series of questions about their motivations for visiting Henrietta Creek. A six-point Likert scale of 1 (being 'not important') to 6 ('very important') was used. As shown in Table 10 the most important reasons for visiting the site were to see the natural features and scenery (mean = 5.21) and to be close to and/or experience nature (4.92). Domestic visitors were more likely to visit Henrietta Creek to experience tranquility (mean = 4.83) and to rest and relax (4.68), while international respondents were more likely to visit the site to see the natural features and scenery (5.27) and be close to and/or experience nature (5.20). Both domestic and international respondents gave the site's status as a National Park a higher ranking than its status as a World Heritage Area. The opportunity to learn about Aboriginal culture (mean = 2.74) was not considered an important reason for visiting Henrietta.

Table 10: Comparative domestic and international visitors' motivations to visit Henrietta Creek.

Reasons for visiting Henrietta Creek	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
See natural features and scenery	90	5.21	5.18	5.27
Be close to/ experience nature	90	4.92	4.78	5.20
Experience tranquillity	90	4.67	4.83	4.33
Rest and relax	92	4.51	4.68	4.17
Opportunities for short walks	90	4.26	4.15	4.47
Outdoor exercise	87	4.07	4.09	4.03
Socialise with family or friends	86	3.79	3.95	3.46
Because it is a National Park	90	3.72	3.60	3.97
Opportunities for long walks	87	3.57	3.43	3.86
Learn about native animals and plants	90	3.47	3.22	3.97
Because it is a World Heritage Area	90	3.29	3.27	3.33
Learn about Aboriginal culture	90	2.74	2.38	3.47

The results outlined in Table 11 show the level of importance ascribed to each motive on a scale from 'not important' to 'very important'. Most reasons were seen as important but to varying degrees of importance. The reasons considered to be the least important were to learn about the Aboriginal culture (22.2%) and the site's status as a World Heritage Area (17.8%).

Table 11: Survey respondents' most cited reasons for visiting Henrietta Creek.

Reasons for visiting Henrietta Creek	Percentage of survey respondents					
	Not important	Slightly important	Moderately important	Important	Quite important	Very important
See natural features and scenery	-	4.4	3.3	15.6	20.0	56.7
Be close to/ experience nature	1.1	5.6	8.9	14.4	24.4	45.6
Experience tranquillity	2.3	3.3	10.0	22.2	34.4	27.8
Rest and relax	3.3	5.4	14.1	22.8	22.8	31.6
Opportunities for short walks	5.6	5.6	21.0	17.8	25.6	24.4
Outdoor exercise	8.0	5.7	20.7	19.5	28.8	17.3
Socialise with family or friends	17.5	2.3	20.9	20.9	19.8	18.6
Because it is a National Park	10.0	10.0	24.4	24.4	15.6	15.6
Opportunities for long walks	14.9	11.5	19.6	21.8	19.6	12.6
Learn about native animals and plants	10.0	14.4	26.7	28.9	7.8	12.2
Because it is a World Heritage Area	17.8	13.3	24.5	22.2	11.1	11.1
Learn about Aboriginal culture	22.2	24.4	25.6	15.6	8.9	3.3

Ten respondents gave other reasons for visiting Henrietta Creek, including 'camping' (three responses), 'to escape civilisation' (two responses), 'for picnicking' (one response), 'to break the drive on our travel route' (one response), 'to look at the trail's building and maintenance' (one response), 'to view interpretative techniques' (one response), and 'to see birds and animals' (one response).

Activities

Respondents were asked to indicate which activities they had undertaken at Henrietta Creek. Results are outlined in Figure 8. The most popular activities were observing the scenery (66.3%), relaxing (54.8%), picnicking (54.7%), photography (51.6%) and short walks (37.9%). There were no significant differences in participation levels between domestic and international respondents.

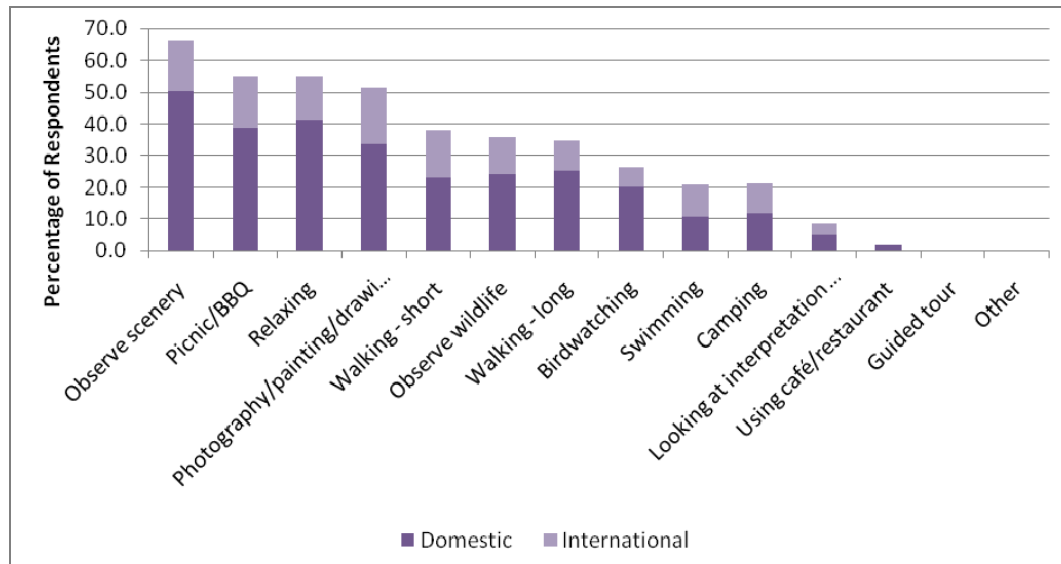


Figure 8: Activities undertaken at Henrietta Creek as cited by survey respondents (n = 93) in response to a multiple-response survey question.

Thirteen respondents indicated there were additional activities they wished to participate in (Table 12), such as viewing a flowing waterfall (three responses), taking a shower (two responses), taking a longer walk (two responses) and accessing information about the site (two responses). Two respondents indicated they would have liked to have swum at the site, but adverse weather prevented them from doing so. It is possible that respondents who indicated they wanted to visit a flowing waterfall did not undertake the Nandroya Falls walk.

Table 12: Activities which survey respondents indicated were desirable as part of their visit to Henrietta Creek (n = 13).

Activity	Overall (n)	Domestic (n)	International (n)
View flowing waterfall	3	1	2
Swim	2	2	-
Shower	2	-	2
Longer walk	2	2	-
Access information about the site	2	1	1
Canopy – no views	1	-	1
See platypus	1	1	-
Total	13	7	6

Figure 9 illustrates the length of time visitors spent at Henrietta Creek. It is apparent that this is a short visitation site with 53.2% of the respondents spending one hour or less at the site. However, a small percentage of respondents stayed for four hours or more (21.3%).

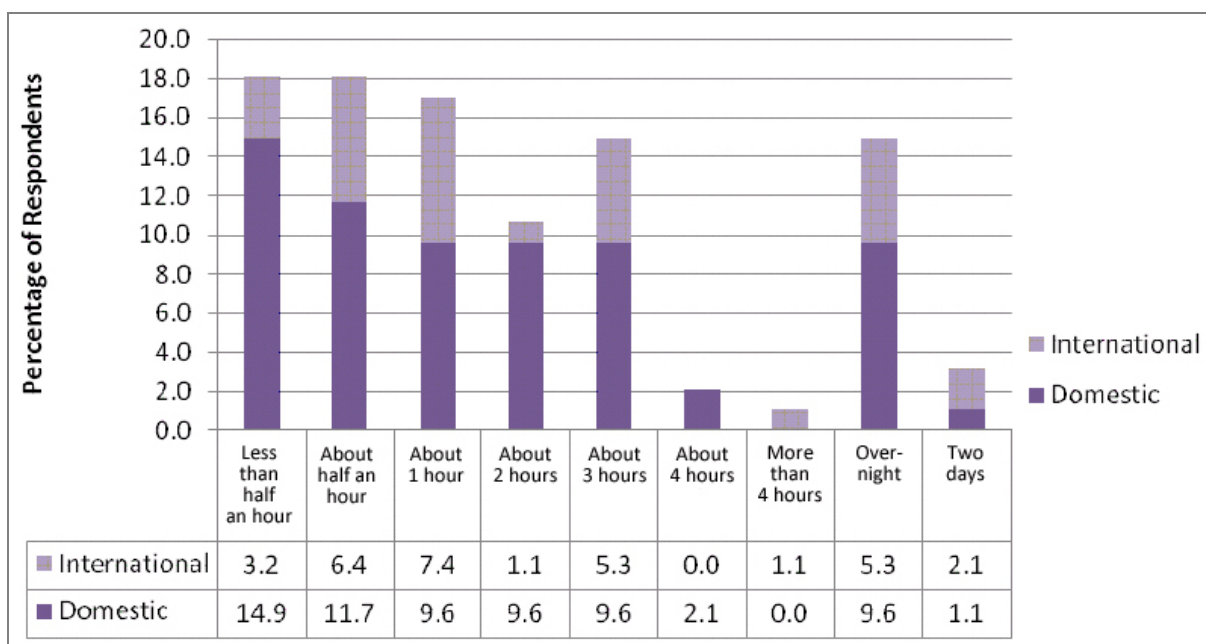


Figure 9: Approximate time spent at Henrietta Creek by both domestic and international visitors (n = 94).

Willingness to Pay

Currently, visitors to protected natural areas in Queensland are not charged an access/entry fee. Respondents were asked to indicate how much they would be prepared to pay if an entrance fee was introduced at the Henrietta Creek site.

The results outlined in Figure 10 show 51.7% of the respondents would not be willing to pay to visit the site. The remaining 48.3% of the sample would only be prepared to pay up to \$10.

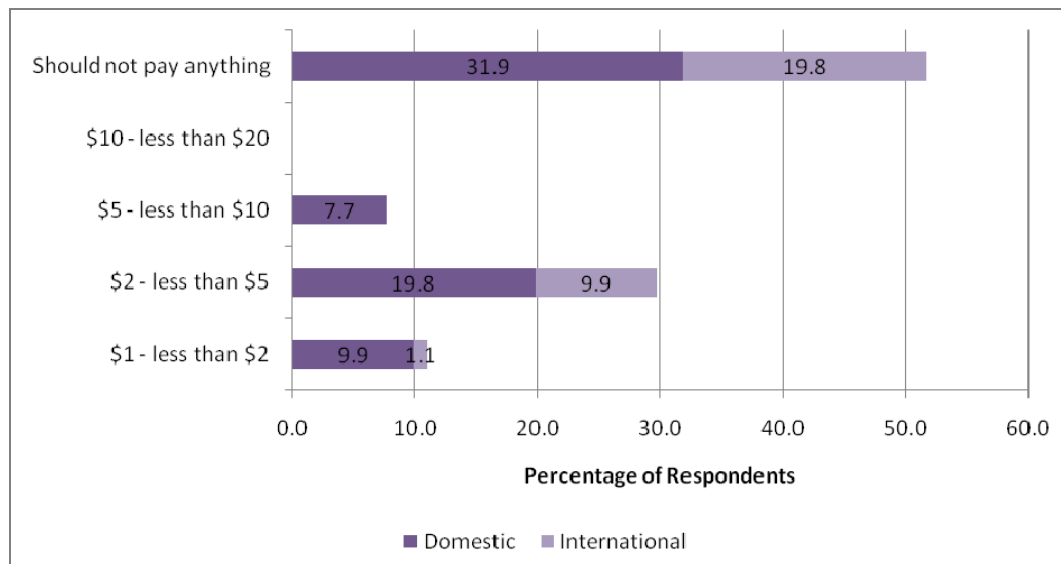


Figure 10: Survey respondents' willingness to pay an access/entrance fee to visit Henrietta Creek (n = 91).

3.2 Perceptions of the Natural Environment

A series of statements were used to gather respondents' views on the natural environment at Henrietta Creek. Respondents were asked to indicate their views using a Likert scale where 1 = 'strongly disagree' and 6 = 'strongly agree'. The mean value of each statement is provided in Table 13. Respondents considered the natural environment to be interesting (mean = 5.32), appealing in terms of natural attractions and scenic beauty (5.20) and in good condition (5.12). Levels of strong disagreement are noted with the site appearing to be disturbed and impacted (mean = 2.45). Domestic visitors had higher levels of satisfaction with the natural environment than did international visitors.

Table 13: Domestic and international visitors' perceptions of the natural environment at Henrietta Creek.

Perceptions of the natural environment at Henrietta Creek	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
The natural environment at this site is interesting.	92	5.32	5.45	5.03
In terms of natural attractions and scenic beauty this site is appealing.	92	5.20	5.40	4.76
The condition of the natural environment at this site appears to be good.	91	5.12	5.19	4.97
The natural environment at this site is well managed.	91	5.08	5.16	4.90
I would like to spend more time exploring this natural environment.	94	5.03	5.19	4.70
I am concerned about the impacts of human activity on the natural environment at this site.	91	3.65	3.61	3.73
This site appears to be disturbed and impacted.	89	2.45	2.21	2.93

Levels of agreement/disagreement with statements about the natural features of the site measured as a percentage are summarised in Table 14. Almost all survey respondents agreed that the site was interesting (98.9%), well managed (96.8%), in good condition (96.8%) and appealing (94.6%). Similarly, almost all respondents indicated they would like to spend more time exploring the site (95.6%). Henrietta Creek was not considered to be disturbed or impacted by 79.2% of respondents.

Table 14: Survey respondents' perceptions of the natural features at Henrietta Creek.

Perceptions of the natural environment at Henrietta Creek	Percentage of survey respondents					
	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The natural environment at this site is interesting.	-	-	1.1	19.6	26.1	53.2
The natural environment at this site is well managed.	-	1.1	2.1	17.4	34.8	44.6
The condition of the natural environment at this site appears to be good.	1.1	-	2.1	19.8	36.3	40.7
In terms of natural attractions and scenic beauty this site is appealing.	2.1	-	3.3	14.3	42.9	37.4
I would like to spend more time exploring this natural environment.	1.1	1.1	2.1	26.5	27.7	41.5
I am concerned about the impacts of human activity on the natural environment at this site.	8.8	22.0	12.0	20.9	25.3	11.0
This site appears to be disturbed and impacted.	30.8	28.6	19.8	8.8	9.9	2.1

3.3 Perceptions and Use of the Site Facilities

As with all Wet Tropics visitor sites sampled, the survey asked respondents to comment on site facilities using a Likert scale of 1 = 'strongly disagree' to 6 = 'strongly agree'. Table 15 indicates the facilities were considered to be in good condition (mean = 5.11) and well managed (5.10). Slightly lower scores were given for the adequacy of facilities (mean = 4.90) and the site's appeal in terms of its character and attractiveness of facilities (4.80). The presence of a ranger at the site was not considered to be overly important (mean = 3.19).

Table 15: Domestic and international visitors' perceptions of the site facilities at Henrietta Creek.

Perceptions of the site facilities at Henrietta Creek	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
The overall condition of the facilities at this site appears to be good.	91	5.11	5.23	4.87
The facilities and infrastructure at this site are well managed.	89	5.10	5.20	4.90
The facilities at this site are adequate.	91	4.90	4.97	4.77
This site is appealing in terms of the character and attractiveness of the facilities.	92	4.80	4.90	4.60
The presence of a ranger at sites like this is important to me.	89	3.19	3.05	3.47

The percentages for agreement/disagreement with each statement are shown in Table 16. There were strong levels of agreement that facilities were in good condition (97.8%), well-managed (96.7%), adequate (95.6%) and appealing (94.6%). Just over half of the respondents (55.1%) disagreed with the statement that the presence of a ranger on the site was important to them.

Table 16: Survey respondents' perceptions of the site facilities at Henrietta Creek.

Perceptions of the site facilities at Henrietta Creek	Percentage of survey respondents					
	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The overall condition of the facilities at this site appears to be good.	-	1.1	1.1	17.6	46.2	34.0
The facilities and infrastructure at this site are well managed.	-	1.1	2.2	16.9	44.9	34.9
The facilities at this site are adequate.	1.1	2.2	1.1	22.0	48.4	25.2
This site is appealing in terms of the character and attractiveness of the facilities.	-	1.1	4.3	32.6	37.0	25.0
The presence of a ranger at sites like this is important to me.	13.5	16.9	24.7	30.3	11.2	3.4



Presence of a Ranger On-site

Figure 11 indicates a ranger on-site was considered beneficial for safety/security (21.7%), to provide information/education (19.6%) and for site maintenance (17.4%). There were no significant differences between the respondent's place of origin and expectations for a ranger on-site.

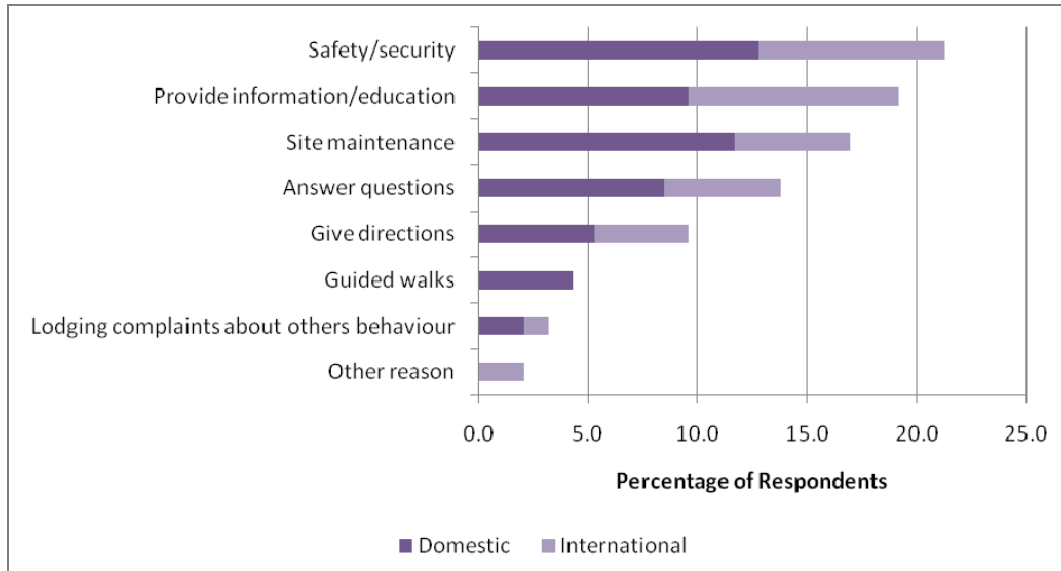


Figure 11: Survey respondents' suggested uses of an on-site Park Ranger at Henrietta Creek in response to a multiple-response survey question (n = 92).

Use of Site Facilities

A multiple-response format was used to ensure respondents had the opportunity to indicate the facilities they had used at the Henrietta Creek site. As displayed in Figure 12, the walking track (64.2%), toilets (48.4%) and picnic table (46.3%) were the most used facilities. Just over a quarter of respondents used the viewing platform (28.4%), the shelter shed (27.3%) and the water tap (24.2%) while 7.6% used the barbeque. A rubbish bin is not provided at the site and a sign requesting that visitors take their rubbish with them on departure has been erected near the entrance to Henrietta Creek. There were no significant differences between domestic and international respondents' use of the facilities.

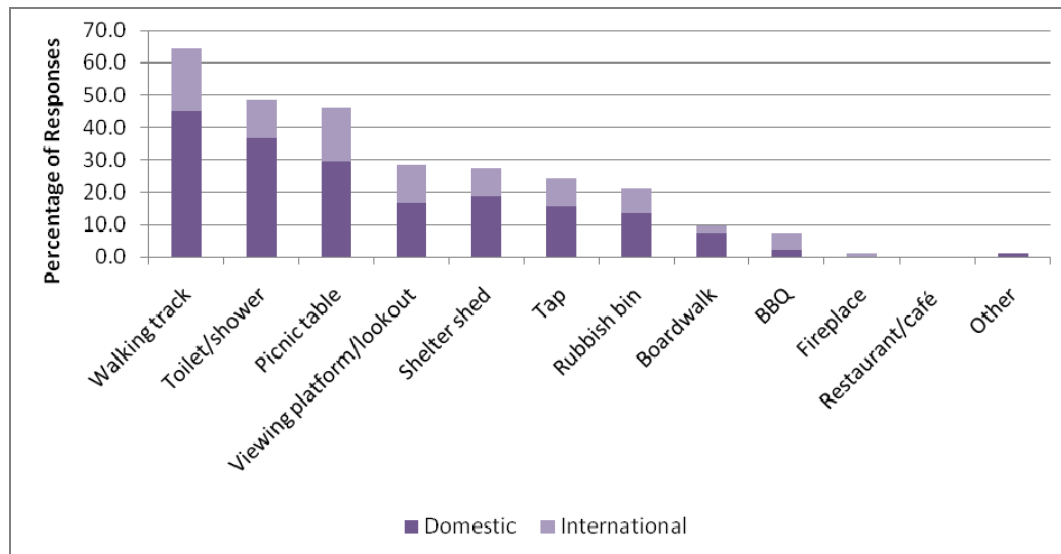


Figure 12: Most popular Henrietta Creek site facilities used by survey respondents, cited in response to a multiple-response survey question (n = 96).

Expected Site Facilities

Respondents were asked to indicate if there were facilities that they would have liked to have seen at the Henrietta Creek site. Twenty-three surveyed visitors (24.5% of the sample) responded to this question, and results are presented in Table 17. Expectations were highest for a rubbish bin (six responses) and shower (six responses). Three respondents expected a toilet and two respondents each expected signage and sign posting on the walking track.

Table 17: Facilities expected to be available at Henrietta Creek by survey respondents (n = 20).

Expectation	Overall (n)	Domestic (n)	International (n)
Rubbish bin	6	5	1
Shower	6	3	3
Toilet	3	2	1
Signage	2	1	1
Sign posted walking track	2	1	1
Open fireplace	1	1	-
Picnic area	1	-	1
Working BBQ	1	-	1
Parking	1	-	1
Total Responses	23	13	10

* Note: Multiple responses were given by some individual respondents.

Information about Henrietta Creek

Survey respondents were asked to indicate the sources they had used to gain information about the Henrietta Creek site prior to their visit, and to provide feedback on aspects of the interpretation provided at the site. Figure 13 indicates the main information sources used were road signs (40.4%) or a prior visit (29.8%). International respondents were more likely to have used a travel guide book (10.6%), a map which labeled it as a tourist site (8.5%) and word-of-mouth (8.5%). The internet, tourist brochures and tourist information centres were not major sources of prior information for the surveyed visitors.

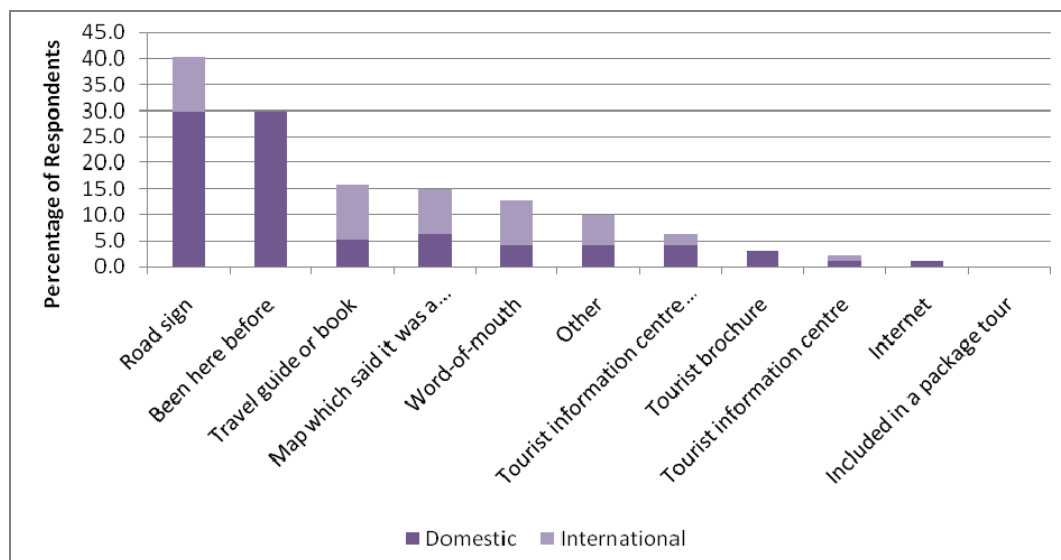


Figure 13: Sources of information consulted by survey respondents prior to visiting Henrietta Creek (n = 96).

Information used before visiting Henrietta Creek was considered accurate by 63.0% of the sample. Table 18 provides comments from five respondents who thought the information they have referred to was not accurate. Two respondents pointed out that they did not obtain a lot of information. Other comments included the site not being as appealing as imagined; the information didn't say to access the walk through Henrietta Creek; and a map showed other waterfalls in the area.

Table 18: Feedback from survey respondents regarding the accuracy or inaccuracy of information about Henrietta Creek obtained prior to their visit (n = 5).

Comments/feedback received	Frequency (n)
Didn't get a lot of information, just that it's here	2
It's not as appealing as I had imagined	1
Didn't say to access the walk through Henrietta Creek	1
Map showed other waterfalls along the road	1
Total Responses	5

On-site Signage

Interpretative and directional signs are important features of the infrastructure at any visitor site. Table 19 provides respondents' levels of agreement with statements about the on-site interpretative signage based on a Likert scale of 1 = 'strongly disagree' to 6 = 'strongly agree'. Levels of agreement were not particularly high for any aspect of the signage provided at the site. The highest mean was recorded for the rules and safety information being considered easy to understand (mean = 4.80) and addressed respondent's interests and concerns (4.63). Directional signage was considered reasonably easy to find (mean = 4.63) and helpful (4.61). The interpretative information about the site's natural environment was also considered moderately interesting and informative (mean = 4.26) and helpful (4.24). Interpretative information about Aboriginal culture received the lowest score.

Table 19: Domestic and international survey respondents' perceptions of on-site signage at Henrietta Creek.

Perceptions of on-site information at Henrietta Creek	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
Signs, maps and directions				
Were easy to find	84	4.63	4.61	4.68
Helped me to find my way around	79	4.61	4.55	4.74
The rules and safety information				
Were easy to understand	79	4.80	4.80	4.80
Addressed my interests and concerns	75	4.63	4.71	4.43
The information about natural features and values				
Was interesting and informative	76	4.26	4.35	4.08
Helped me to better appreciate the special natural features of the area.	75	4.24	4.23	4.26
The Aboriginal cultural information				
Was interesting and informative	54	3.11	3.11	3.13
Helped me to understand the significance of this area for rainforest Aboriginal people	55	2.93	2.90	3.00

Table 20 outlines the percentage of responses for each level of agreement/disagreement to statements about on-site information at Henrietta Creek. The majority of respondents agreed that the signage about the natural features and values was interesting and informative (78.9%) and helped in appreciating the natural features of the environment (79.9%). Just over half of all respondents (55.5%) did not feel that Aboriginal cultural information was informative, while 60.0% disagreed with the statement that Aboriginal cultural information helped them to understand the significance of the site to rainforest Aboriginal people.

Table 20: Survey respondents' perceptions of on-site tourism information provided at Henrietta Creek.

Perceptions of on-site information at Henrietta Creek	Percentage of survey respondents					
	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
Signs, maps and directions						
Were easy to find	4.7	4.7	6.0	22.6	31.0	31.0
Helped me to find my way around	2.6	5.1	6.3	29.1	29.1	27.8
The rules and safety information						
Were easy to understand	-	1.3	6.3	27.8	40.5	24.1
Addressed my interests and concerns	1.3	1.3	5.3	34.8	40.0	17.3
The information about natural features and values						
Was interesting and informative	-	6.6	14.5	38.1	27.6	13.2
Helped me to better appreciate the special natural features of the area.	2.7	2.7	14.7	41.3	25.3	13.3
The Aboriginal cultural information						
Was interesting and informative	14.8	24.0	16.7	29.6	9.3	5.6
Helped me to understand the significance of this area for rainforest Aboriginal people	21.8	23.7	14.5	23.7	12.7	3.6

Using an open-ended question, survey respondents were asked for suggestions on additional interpretative information they would like to see at the site. Nineteen respondents (19.8% of the sample) provided suggestions for additional on-site information (Table 21). Suggestions included more directional signage on the Nandroya Falls walking track (six responses) and more information about the forest (four responses). Other suggestions were made for more information about the site's natural features and wildlife (two responses) and historical/ heritage information (two responses).

Table 21: Survey respondents' suggested additional visitor information that could be made available at the Henrietta Creek site (n = 19).

	Overall (n)	Domestic (n)	International (n)
Cultural Information			
Discovery dates and simple heritage information	2	1	1
Flora and Fauna			
Forestry information	4	3	1
More information about natural features and wildlife	2	-	2
Tree and plant identification	1	1	-
Walk Information			
More signage on walking track – got lost	6	5	1
Maps to use during the walks	1	-	1
Other			
More informative travel guides to understand what to expect	1	1	-
Other surrounding natural attractions	1	1	-
Better signage	1	-	1
Better road signs	2	2	-
Brochures to say self-registration is available at campground	1	-	1
Total Responses	22*	14	8

* Note: Multiple responses were given by some individual respondents.

3.4 Visitor Experience

Visitors were asked to comment on aspects of their visit that enhanced or increased their enjoyment of the site. An open-ended question was used and 47 responses were received from 45 respondents (47.9% of the sample). Results were grouped into four categories: natural, facilities, psycho-social and others (Table 22). The waterfall (12.8%), peace and tranquility (10.6%) and well maintained facilities (8.5%) were the most cited aspects. Collectively, the site's natural aspects made a significant contribution to respondents' enjoyment of the site (18 responses). Opportunities to swim and camp, as well as the picnic shelter, also enhanced their experience (three responses each).

Table 22: Aspects that visitors considered enhanced or increased their enjoyment of Henrietta Creek (n = 45).

	Frequency (n)	Percentage (%)
Natural		
Waterfall	6	12.7
Beautiful place	2	4.3
Unspoilt nature of the site	2	4.3
Sighting Ulysses butterflies	2	4.3
Rainforest	2	4.3
Great weather	1	2.1
Snake encounter	1	2.1
Nocturnal animals and bandicoots	1	2.1
Nice to access & sit by creek without crocodile worries	1	2.1
Facilities		
Well maintained facilities	4	8.5
Camping	3	6.4
Picnic shelters	3	6.4
Barbeque	2	4.3
The walking track – so natural	2	4.3
Privacy of campsite	1	2.1
Not having signage ruin natural aspect of such a place	1	2.1
Site is clean	1	2.1
Psycho-social		
Peace and tranquility	5	10.6
Swimming	3	6.4
Friendly Queenslanders	1	2.1
Other		
Easy access	2	4.3
Few other tourists	1	2.1
Total Responses	47	100.0

* Note: Multiple responses were given by some individual respondents.

Respondents were also asked for their views on aspects of the site that detracted from their enjoyment. Thirty responses were received from 32 respondents (33.3% of the overall sample) and the results grouped into five categories (Table 23) generally mirroring the categories used to indicate the appealing aspects of the site: natural, facilities, psycho-social, rules/regulation/safety, and other. No concerns of a psycho-social nature were noted; however there was some concern about stinging trees and the condition of the Nandroya Falls track (six responses). Problems encountered when turning off the highway into the site from the east were identified (five responses). March flies were also a factor that detracted from the visitor experience (four responses). Other issues of concern were the lack of rubbish bins (three responses) and damage by feral pigs (three responses).

Table 23: Aspects visitors considered took away or detracted from their enjoyment of Henrietta Creek (n = 32).

	Frequency (n)	Percentage (%)
Natural		
March flies	4	12.5
Pig damage, particularly around creeks	3	9.4
Mosquitoes	1	3.1
Tree full of bugs raining on me	1	3.1
Facilities		
Entrance difficult to access from other side of road	5	15.6
Lack of bins	3	9.4
Smell of toilets	2	6.3
Trail blocked at one point	1	3.1
Barbeque not working	1	3.1
Inadequate directional signage on Nandroya Falls track	1	3.1
Rules / Regulations / Safety		
The constant lookout for stinging plants along track edges at Nandroya Falls and muddy/slippery landslides next to cliff	6	18.8
Other		
This unnecessarily long survey	2	6.3
Litter on track	1	3.1
Toilet paper/ some litter	1	3.1
Total Responses	32	100.0

The conclusions that can be drawn from the results reported in Tables 22 and 23 are that respondents considered Henrietta Creek to be a tranquil site that has an interesting natural environment. However, some concerns were raised about aspects of the site such as the presence of stinging trees and the poorly maintained walking tracks.

Other Visitors

The behaviour of other visitors at a site can affect the level of enjoyment an individual derives from visiting that site. In circumstances where overcrowding occurs the overall level of enjoyment could be expected to fall. However, the link between perceived crowding and satisfaction is weak and is dependent on personal norms, situational variables and site infrastructure (West, 1981; Stankey and McCool, 1984; Kalisch and Klaphake, 2007). A series of statements were presented in the survey and respondents were asked to comment using a Likert scale of 1 = 'strongly disagree' to 6 = 'strongly agree'. Table 24 shows there was relatively little concern with the number of other people at the site (mean = 1.79), the behaviour of other visitors detracting from the respondent's enjoyment of the site (1.71) or the presence of other people preventing respondents from doing what they wanted to do (1.70). The environmental behaviour of other visitors was considered acceptable (mean = 4.22).

Table 24: Domestic and international visitors' perceptions of other site visitors.

Perceptions of other site visitors at Henrietta Creek	n	Overall Mean	Domestic visitors (mean)	International visitors (mean)
The behaviour of other visitors at this site has been on the whole environmentally responsible.	89	4.22	4.31	4.04
There were too many people at this site today.	91	1.79	1.90	1.57
The presence of other people at this site prevented me from doing what I wanted to.	89	1.71	1.74	1.64
The behaviour of some visitors at this site detracted from my enjoyment of this site.	90	1.70	1.74	1.62

Table 25 provides respondents' levels of agreement/disagreement with statements relating to perceptions of other visitors at the site. Most respondents did not consider that other visitors prevented them from doing what they wanted (92.3%) and the behaviour of other visitors did not detract from respondents' enjoyment of the site (91.0%). Respondents agreed that other visitors were environmentally responsible (71.9%). Only 5.5% of respondents thought there were too many people at the site.

Table 25: Perceptions of other visitors at Henrietta Creek.

Perceptions of other site visitors at Henrietta Creek	Percentage of survey respondents					
	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The behaviour of other visitors at this site has been on the whole environmentally responsible.	19.1	4.5	4.5	12.4	25.8	33.7
There were too many people at this site today.	53.8	25.3	15.4	1.1	2.2	2.2
The presence of other people at this site prevented me from doing what I wanted to.	63.4	20.0	8.9	2.2	2.2	3.3
The behaviour of some visitors at this site detracted from my enjoyment of this site.	66.2	16.9	7.9	1.1	4.5	3.4



3.5 Additional Comments

The survey instrument provided respondents with the opportunity to record comments on any aspect of their visit. Comments were received from 17 respondents at Henrietta Creek. Generally, respondents provided positive responses, although some suggestions focused on better maintenance of the Nandroya Falls and Tchupala Falls walks, and a review of the on-site camping registration system.

Date	Comment
2 October 2009	<p>'Nice spot to stop for lunch, would probably look for a quieter (not beside the highway) place to camp. We like wild, rugged National Parks and bush.'</p> <p><i>North Queensland visitor, male, 57 years</i></p>
2 October 2009	<p>'Booked online – very difficult – then had to go to Atherton instead to book campsite, but when we got here there is self-registration. Only three sites already booked. No clear instructions that you could just self-register.'</p> <p><i>German visitor, female, 66 years</i></p>
2 October 2009	<p>'People left rubbish lying around at sites, on track and near waterways. Maybe a rubbish bin would stop this irresponsible behaviour.'</p> <p><i>Far North Queensland visitor, male, 45 years</i></p>
28 November 2009	<p>'Where are the visitors on a Saturday?'</p> <p><i>USA visitor, male, 50 years</i></p>
1 May 2010	<p>'Lots of people in small space, all well behaved but feels a little crowded.'</p> <p><i>North Queensland visitor, female, 25 years</i></p>
1 May 2010	<p>'This survey was clearly designed for people who do not get out as much as the few like me, who know all these areas so very well.'</p> <p><i>Far North Queensland visitor, male, 49 years</i></p>
2 May 2010	<p>'Can you reopen Wallicher Falls to Crawford's lookout walk – that was beautiful? And go back in and reopen and maintain the Misty Mountains walks. What's the point of opening new tracks if you don't maintain the old (brilliant) ones? E.g. South Johnstone campground to Downey Creek and MacNamee Creek at Mena Creek.'</p> <p>Additional shed would be good for shelter from the rain.'</p> <p><i>Far North Queensland visitor, female, 49 years</i></p>
2 May 2010	<p>'Clean the track better cause I swear the stinging trees are so bad we had to walk so <u>close</u> to the edge of a cliff you almost fall off because the edge is so muddy – get your act together [Henrietta Creek/Nandroya Falls].'</p> <p><i>Far North Queensland visitor, male, 17 years</i></p>
2 May 2010	<p>'Stinging trees fringing track were scary – sign at start of track is well placed and informative.'</p> <p>More walking tracks in the area would be good. The waterfall track from Wallicher Falls to Crawford's Lookout was my favourite walk, but it has been closed for many years, a real shame as all our visitors were amazed there</p>

Date	Comment
	<p>could be so many waterfalls in such a small area.</p> <p>Another small picnic table shed would be great in this very wet National Park. Thank you for the opportunity to make a comment.'</p> <p><i>Far North Queensland visitor, male, 59 years</i></p>
2 May 2010	<p>'Beautiful scenery and environment. I like it. I feel myself very relaxed and peaceful. I'll recommend others to come here. Congratulations.'</p> <p><i>Turkish visitor, female, 35 years</i></p>
2 May 2010	<p>'Haven't been here long but appreciate the opportunity to be able to enjoy nature with campground amenities and not have to pay. I reckon more tax money should be spent on making nature more accessible and convenient for all to enjoy. Thanks.'</p> <p><i>USA visitor, male, 30 years</i></p>
2 May 2010	<p>'A wonderful walk. Shoot the pigs please; feral pigs have eroded the track making it dangerous to traverse in places.'</p> <p><i>North Queensland visitor, female, 54 years</i></p>
14 May 2010	<p>'Would be best to know at which campground we have to pre-book online and at which we can do self registration at arrival. Self registration is much better for short notice planning like we do.'</p> <p><i>German visitor, male, 27 years</i></p>
14 May 2010	<p>'The booking process for getting the permit to camp in National Parks is not very straight forward and too complicated for foreign tourists. Booking over phone or internet is mostly impossible on short notice. Self registration like at this site is much better, though we did not know about it before. We had booked online before. Would have been very nice to know from the brochure that we did not have to book beforehand.'</p> <p><i>German visitor, female, 27 years</i></p>
14 May 2010	<p>'The less people the better.'</p> <p><i>Northern Territory visitor, male, 66 years</i></p>
14 May 2010	<p>'Tchupala Falls – walk and stairs needs maintenance and attention. This area has been neglected for some years.</p> <p>The local bullet proof amenities seem to be somewhat overdone.'</p> <p><i>North Queensland visitor, female, 37 years</i></p>
15 May 2010	<p>'Please place more directional signs on the track to tell people how many kilometres they still need to walk to the end of the track and please also set up numbers along the track in case people have an accident – they can report where they are.'</p> <p><i>Far North Queensland visitor, female, 30 years</i></p>

4. Management Considerations

The findings of this survey suggest management consideration is given to the following matters:

- Henrietta Creek is primarily a day use site with most visitors staying for an hour or less. Observations by researchers suggest that many visitors fail to notice signage that points out the availability of short walks. If signs were more prominent more visitors may undertake the walks.
- Many visitors to the site stop for morning tea and lunch breaks. This user segment rarely participates in walking activity.
- Due to the high rainfall aspect of the site, a second shelter shed for picnicking is suggested.
- Maintenance of the Nandroya Falls walking track is required. Attention should be paid to the presence of stinging trees, widening some narrow sections of the track and the installation of directional signage. Feral pig control is suggested near the waterfall.
- Signage on the Palmerston Highway indicating the Henrietta Creek campground should state that it is also the access to Nandroya Falls.
- Consideration should be given to erecting signage that indicates the approximate time needed for the full walk to Nandroya Falls at the Henrietta Creek walking bridge.
- The three designated campsites are completely hardened by vehicle use. Designation of specific parking areas for the campsite may minimise some damage.
- During the wet season, undesignated campsites are often saturated, making camping uncomfortable. Grassed areas succumb to vehicle tyre marks. One solution may be to enhance drainage to ensure run-off of water.
- There is some confusion about the system currently in place for self-registration of camp sites as well as the location of camp sites. Improved signage may resolve this issue.
- Additional interpretative signage and more effective directional signage are suggested.
- The site's World Heritage status was not a major 'pull factor' for visiting the site. This finding highlights the need for a more vigorous and coordinated strategy to promote the Wet Tropics' World Heritage status. One element of this strategy may be to encourage destination marketing collateral to include the World Heritage logo.
- Installation of a visitor counter (similar to toilet counter) at the entrance to the boardwalk may provide a more detailed picture of visitor numbers and daily visitor patterns. Data of this nature combined with the results of this survey may give managers a better understanding of how the site is used on a daily, weekly and monthly basis.

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Appendix 1: Site Survey Instrument



Visitor Site Survey in the Wet Tropics World Heritage Area

Interviewer:

Survey Location:

Survey Date: Time:

Weather: ☐ Sunny ☐ Overcast ☐ Raining ☐ Hot ☐ Warm ☐ Cool

Other Comments: (e.g. windy, smoky, mist)

.....

Dear Visitor,

We are researchers from James Cook University, School of Business – Tourism, and on behalf of the Wet Tropics Management Authority we are exploring visitors' expectations and experiences of this Wet Tropics site. We would be very grateful if you would participate in the study by completing this questionnaire.

Your participation will help to improve visitor services and the continued management of sites by understanding visitors' needs and views.

The questionnaire is **voluntary** and all **responses remain completely anonymous**.

The questionnaire will take approximately **15 minutes** to complete.

Thank you very much for your participation.

If you would like any more information about this project please contact the project manager. If you would like to discuss any ethical matters regarding this project please contact the Ethics Administrator. This project has Human Ethics approval H3100 from James Cook University.

PLEASE DETACH AND RETAIN THIS INFORMATION PAGE ONLY FOR YOUR FUTURE REFERENCE

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HOW TO COMPLETE THIS QUESTIONNAIRE – Where questions require a ‘Yes’ or ‘No’ answer, or multiple response, please put a tick ‘✓’ in the checkbox beside the appropriate response.

Where a scale question is provided (e.g. scale from 1 to 6) please circle the response which best applies.

SECTION A: BACKGROUND INFORMATION

1. **Where do you normally live?** ☐ Within Australia Postcode:
☐ Overseas Country:
2. **How long have you lived there?** Years
3. Which of these best describes your **occupation**?
☐ Self-employed ☐ Professional ☐ Retail ☐ Domestic duties
☐ Management ☐ Office/clerical ☐ Public service ☐ Manual/factory work
☐ Service industry ☐ Tradesperson ☐ Student ☐ Retired/semi-retired
☐ Other

4. What is the highest level of **formal education** you have completed so far?
☐ Primary (1-7 years of education)
☐ Secondary (8-12 years of education)
☐ Tertiary A (Technical or further education institution)
☐ Tertiary B (University)
5. **What is your age?** years
6. **Gender:** ☐ Male ☐ Female

SECTION B: TRANSPORT AND TRAVEL

7. Are you with an **organised tour**? ☐ Yes
☐ No (Go to Question 8)
 If you answered ‘Yes’, what is the name of the tour company?

 Approx. number of people on your tour:
8. If you travelled in a **private or hired vehicle**, how many people including yourself are in your vehicle?
 Adults Children ☐ Private vehicle ☐ Hired vehicle

9. In your travels today, where did you **previously visit** before coming to this site?
(e.g. township, visitor site)

.....

10. In your travels today, where do you plan to go **after leaving this site**?

.....

11. How often do you **visit natural areas** like this (e.g. National Parks)?

- ☐ This is my first time
☐ Less than once a year
☐ Once a year
☐ Between 2 and 5 times a year
☐ More than 5 times a year

SECTION C: REASONS FOR VISITING

12. Please indicate how important the following **reasons** were for you **visiting this site** today.

	Not important	Slightly important	Moderately important	Important	Quite important	Very important
See natural features and scenery	1	2	3	4	5	6
Be close to / experience nature	1	2	3	4	5	6
Social with family or friends	1	2	3	4	5	6
Rest and relax	1	2	3	4	5	6
Experience tranquility	1	2	3	4	5	6
Outdoor exercise	1	2	3	4	5	6
Opportunities for short walks	1	2	3	4	5	6
Opportunities for long walks	1	2	3	4	5	6
Because it is a World Heritage Area	1	2	3	4	5	6
Because it is a National Park	1	2	3	4	5	6
Learn about native animals and plants	1	2	3	4	5	6
Learn about Aboriginal culture	1	2	3	4	5	6
Other (please specify)	1	2	3	4	5	6

13. What **activities** did you engage in at this site today?

- | | |
|---|---|
| <input type="checkbox"/> Observing scenery | <input type="checkbox"/> Walking – short (1 hour or less) |
| <input type="checkbox"/> Bird watching | <input type="checkbox"/> Walking – long (1-6 hours) |
| <input type="checkbox"/> Observe wildlife | <input type="checkbox"/> Swimming |
| <input type="checkbox"/> Photography / painting / drawing | <input type="checkbox"/> Guided tour |
| <input type="checkbox"/> Picnic / barbeque (BBQ) | <input type="checkbox"/> Looking at interpretation material |
| <input type="checkbox"/> Using café / restaurant | <input type="checkbox"/> Relaxing |
| <input type="checkbox"/> Camping | <input type="checkbox"/> Other (please specify): |

.....

14. Were there particular things you wanted to do today at this site which you were unable to do?

- ☐ Yes
☐ No

If you answered 'Yes', please specify:

.....

15. How **long** have you spent at this site today?

- | | |
|--|--|
| <input type="checkbox"/> Less than half an hour | <input type="checkbox"/> About 3 hours |
| <input type="checkbox"/> About half an hour | <input type="checkbox"/> About 4 hours |
| <input type="checkbox"/> About 1 hour | <input type="checkbox"/> More than 4 hours |
| <input type="checkbox"/> About 2 hours | <input type="checkbox"/> Overnight |
| <input type="checkbox"/> Days (please specify) | |

16. If an **entrance fee** were introduced to access this site today, how much would you be willing to pay?

- ☐ \$1 – less than \$2 (AUD)
☐ \$2 – less than \$5 (AUD)
☐ \$5 – less than \$10 (AUD)
☐ \$10 – less than \$20 (AUD)
☐ I do not think I should pay anything to access this site as a day visitor.

SECTION D: NATURAL ENVIRONMENT

17. The following statements are about the **natural features** of this site. Please rate the extent to which you agree or disagree with each statement.

	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The natural environment at this site is interesting.	1	2	3	4	5	6
I would like to spend more time exploring this natural environment.	1	2	3	4	5	6
In terms of natural attractions and scenic beauty this site is appealing.	1	2	3	4	5	6
The condition of the natural environment at this site appears to be good.	1	2	3	4	5	6
The natural environment at this site is well managed.	1	2	3	4	5	6
I am concerned about the impacts of human activity on the natural environment at this site.	1	2	3	4	5	6
This site appears to be disturbed and impacted.	1	2	3	4	5	6

SECTION E: SITE FACILITIES

18. What facilities have you used at this site today? (Tick as many as applicable)

☐ Picnic table

☐ Walking track

☐ Shelter shed

☐ Boardwalk

☐ Restaurant / café

☐ Viewing platform / lookout

☐ Rubbish bin

☐ Fire place

☐ Toilet / showers

☐ Barbeque

☐ Tap

☐ Other (please specify)

19. Were there particular **facilities at this site you were expecting** to find which were not available?

☐ Yes

☐ No

If you answered 'Yes', please specify:

.....

.....

20. Please rate the extent to which you agree or disagree with each of the following statements about the **facilities and management** at this site.

	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
The site is appealing in terms of the character and attractiveness of the facilities.	1	2	3	4	5	6
The facilities at this site are adequate.	1	2	3	4	5	6
The overall condition of the facilities at this site appears to be good.	1	2	3	4	5	6
The facilities and infrastructure at this site are well managed.	1	2	3	4	5	6
The presence of a ranger at sites like this is important to me.	1	2	3	4	5	6

21. If you **agreed the presence of a ranger was important**, what are the reasons for this?

☐ To provide information / education

☐ To give directions

☐ To answer questions

☐ For lodging complaints about others' behavior

☐ To take us on guided walks

☐ For site maintenance

☐ For safety / security

☐ Other (please specify)

.....

SECTION F: INFORMATION

22. How did you **find out about this site**?

☐ Have been here before

☐ Road sign

☐ Word of mouth

☐ Map which said it was a tourist site

☐ Travel guide or book

☐ From the web

☐ The trip here was included in a package tour

☐ Tourist brochure (which one?)

☐ Tourist information centre in North Queensland

☐ Tourist information centre (other)

☐ Other (please specify):

23. If you obtained **prior information** about this site, was the information accurate?

☐ Yes

☐ No

If you answered 'No', please specify:

24. Did you refer to any of the information available at this site today? ☐ Yes ☐ No

25. Please rate the extent to which you agree or disagree with the following statements about **information available** at this site.

	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
Signs, maps and directions...						
were easy to find	1	2	3	4	5	6
helped me to find my way around	1	2	3	4	5	6
The rules and safety information...						
were easy to understand	1	2	3	4	5	6
addressed my interests and concerns	1	2	3	4	5	6
The information about natural features and values...						
was interesting and informative	1	2	3	4	5	6
helped me to better appreciate the special natural values of the area	1	2	3	4	5	6
The Aboriginal cultural information...						
was interesting and informative	1	2	3	4	5	6
helped me to understand the significance of this area for Rainforest Aboriginal people	1	2	3	4	5	6

26. If you were to visit this site again, is there any **additional information** you would like?

☐ Yes

☐ No

If you answered 'Yes', please specify:

.....

.....

SECTION G: VISITOR EXPERIENCE

27. Were there any particular aspects of your visit that **increased / enhanced your enjoyment** of this site?

☐ Yes

☐ No

If you answered 'Yes', please specify:

.....

.....

28. Were there any particular aspects of your visit that **took away / detracted from your enjoyment** of this site?

☐ Yes

☐ No

If you answered 'Yes', please specify:

.....

.....

29. Please rate how strongly you agree or disagree with the following statements about **other visitors at this site** today.

	Strongly disagree	Somewhat disagree	Mildly disagree	Mildly agree	Somewhat agree	Strongly agree
There were too many people at this site today.	1	2	3	4	5	6
The presence of other people at this site prevented me from doing what I wanted to do.	1	2	3	4	5	6
The behavior of other visitors at this site has been on the whole environmentally responsible.	1	2	3	4	5	6
The behavior of some visitors at this site detracted from my enjoyment of this site.	1	2	3	4	5	6

ADDITIONAL COMMENTS:

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.....

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.....

.....

.....

.....

.....

.....

THANK YOU VERY MUCH FOR YOUR PARTICIPATION

Appendix 2: Site Photographs

Henrietta Creek site facilities



September 2009



April 2010



Photographs by Julie Carmody (JCU) and Fay Falco-Mammone (Focus on Research)

Henrietta Creek site signage



Photographs by Julie Carmody (JCU) and Fay Falco-Mammone (Focus on Research)